## 11. Priyanka

Program Name: Priyanka.java Input File: priyanka.dat

Priyanka is an elementary school teacher working with her students on their spelling words. The students have already learned about vowels and consonants, and they are also able to alphabetize letters. Priyanka noticed one very special type of word that she thought was pretty cool. These are words with all of the vowels at the front of the word and all the consonants at the end. She also noticed that sometimes, the vowels were sorted within themselves and the consonants were sorted as well.

Then she discovered what she called "Woo-Hoo" words. In it, the vowels {A,E,I,O,U} are sorted in reverse order at the start of the word and the consonants were sorted in ascending order at the end of the word.

Here are some examples: OAKS, EAST, OOPS, EASY, A, OF

To have a little fun in class, any time one of her students spotted a spelling word like this, they would shout "WOO-HOO!!!" Thus they are called Woo-Hoo Words.

Please write a program to test a word to see if it is worthy for a shout of "WOO-HOO!!!"

**Input:** Input will consist of an integer N, the number of test cases. The number of test cases will be in range [1,20]. Each subsequent line will contain one string consisting only of upper-case letters with no spaces and no punctuation marks. Each string will have a length in the range [1,32]

**Output:** Each line of output will consist of the letters of the input string rearranged. The vowels {A,E,I,O,U} will come first in reverse alphabetical order followed immediately by the consonants in alphabetical order. There is not a space separating those two groups. If a word is a "woo-hoo" word, then "WOO-HOO" will be written before the output word with one space separating it from the word.

## Sample input:

5 UNIVERSITY HELLO ABCDEFGHIJ EACH

## **Sample output:**

UIIENRSTVÝ OEHLL IEABCDFGHJ WOO-HOO EACH WOO-HOO I